This listing of claims will replace all prior versions, and listings, of claims in the application:

Amendments to the claims:

Cancel claims 1 and 2, without prejudice.

Amend claims 3-5, 15-18, 20-22, 24, 25, 28 and 32 as follows:

Listing of Claims:

1. Canceled

2. Canceled

3. (currently amended) Method for power control according to claim ~~2~~ 4, wherein the speed control and limitation takes place in that the delay (t) is independent from the number of revolutions.

4. (currently amended) ~~Method for power control according to claim 2,~~ Method for controlling the power of electronically switched two-phase reluctance machines with direct transmission of the demagnetization energy of a switched-off phase to the following phase, characterized in that the switching-on of the main current (Ip) takes place delayed by a duration (t) after the phase commutation, wherein between the locking of the power switch (21X) of a phase (X) and the current conducting phase of the switch (21Y) of the following phase (Y), the self-induction voltage Ua, which arises by the switching-off of the phase (X) at the connection between the main winding (112X) and the power switch (21X), is supplied over a bypass diode (22) to a phase (Y, X, Y) which is not separated from the source of current, wherein the rise-delay time (t) of the main current depends on the number of revolutions and arises from the superposition of the complementary phase commutation signals with form similar signals which are phase-shifted with respect to the first ones by an angle (v) which is independent of the number of revolutions.

5. (currently amended) ~~Method for power control according to claim 2,~~ Method for controlling the power of electronically switched two-phase reluctance machines with direct transmission of the demagnetization energy of a switched-off phase to the following phase, characterized in that the switching-on of the main current (Ip) takes place delayed by a duration (t) after the phase commutation, wherein between the locking of the power switch (21X) of a phase (X) and the current conducting phase of the switch (21Y) of the following phase (Y), the self-induction voltage Ua, which arises by the switching-off of the phase (X) at the connection between the main winding (112X) and the power switch (21X), is supplied over a bypass diode (22) to a phase (Y, X, Y) which is not separated from the source of current, wherein the duty cycle of the power switches (21) of the phases (X, Y) is controlled over the phase difference of the output signals of two Hall sensors (31, 31a).

6. (previously amended) Method for power control according to claim 4, wherein the phase-shifted signals of two digital Hall sensors 31, 31a arise because the sensors are mechanically displaceable.

7. (previously amended) Method for power control according to claim 4, wherein the mechanical displacement of a Hall sensor (31) or the electrical phase shifting of its output signal takes place depending on an output value including pressure, flow, temperature, current, or oscillation amplitude which comes from a coupled working device.

8. (previously amended) Method for power control according to claim 7, wherein the displacement of the Hall sensor (31) or the electrical phase shifting of its output signal changes the operating mode of the machine from a motor to a generator function.

9. (previously amended) Method for power control according to claim 5, wherein the desired direction of rotation ensues over the presetting of a starting sensor (31) and the speed control takes place over the phase

difference between the starting sensor (31) and a second sensor (31a), whereby the phase difference is changed by the manual displacement of these sensors (31, 31a) or by the electrical phase shifting of the output signals.

10. (previously amended) Method for power control according to claim 4, wherein the rise-delay time (t) of the main current (Ip) takes place over an electronic time function element which is set into operation by the high/low transition of the phase control.

11. (previously amended) Method for power control according to claim 10, wherein the interruption of the main current within a phase is purposefully used to influence the current flow in this phase and in the following phase.

12. (previously amended) Method for power control according to claim 11, wherein a saw-tooth rotor position signal, used for the motor control, is gained by means of a profiled disk (32) which rotates in front of an analog Hall sensor (31c) polarized by the permanent magnet (33) which forms together with the latter a system of variable reluctance so that the output signal of the Hall sensor (31c) is a saw-tooth signal.

13. (previously amended) Method for power control according to claim 12, wherein the saw-tooth signal of the Hall sensor (31c) variable rectangular control signals are gained in that the level of the saw-tooth signals is compared with the adjustable trigger level (Uk) of a trigger (34).

14. (previously amended) Method for power control according to claim 13, wherein it uses an automatic phase symmetry method, for which a signal (Ud), which is proportional to the difference of the phase duration of both phases, serves for the variation of the trigger level (Uk) of a trigger (34) which corrects the phase width.

15. (currently amended) Method for power control according to claim ~~2~~ 4, wherein the control of the digital phase commutation is derived from the recognition of the phase position of an analog signal which can be phase-shifted if need be.

16. (currently amended) ~~Method for power control according to claim 2,~~ Method for controlling the power of electronically switched two-phase reluctance machines with direct transmission of the demagnetization energy of a switched-off phase to the following phase, characterized in that the switching-on of the main current (Ip) takes place delayed by a duration (t) after the phase commutation, wherein between the locking of the power switch (21X) of a phase (X) and the current conducting phase of the switch (21Y) of the following phase (Y), the self-induction voltage Ua, which arises by the switching-off of the phase (X) at the connection between the main winding (112X) and the power switch (21X), is supplied over a bypass diode (22) to a phase (Y, X, Y) which is not separated from the source of current, wherein the optimization of the phase commutation (efficiency) takes place by the automatic correction of the main current (Ip) and/or of the bypass current (Ib) as well as of the path of the self-induction voltage (Ua) in direction of the minimal values or of the power draw of the motor.

17. (currently amended) ~~Method for power control according to claim 2,~~ Method for controlling the power of electronically switched two-phase reluctance machines with direct transmission of the demagnetization energy of a switched-off phase to the following phase, characterized in that the switching-on of the main current (Ip) takes place delayed by a duration (t) after the phase commutation, wherein between the locking of the power switch (21X) of a phase (X) and the current conducting phase of the switch (21Y) of the following phase (Y), the self-induction voltage Ua, which arises by the switching-off of the phase (X) at the connection between the main winding (112X) and the power switch (21X), is supplied over a bypass diode (22) to a phase (Y, X, Y) which is not separated from the source of current,

wherein the control functions of the machine are carried out by means of a programmable Hall sensor (38d).

18. (currently amended) Method for power control according to claim ~~2~~ 4, wherein the control functions of the machine are carried out by means of a differential Hall sensor, this Hall sensor being directly triggered by teeth (121) of a rotor (2) of the machine.

19. (previously amended) Method for power control according to claim 7, wherein the phase commutation is adjusted depending on a current which traverses the windings (112, 113) by a current path which traverses the magnetic control circuit of the Hall sensor (31).

20. (currently amended) Method for power control according to claim ~~1~~ 4, wherein two-phase reluctance machines which consist of two angle-offset, independently operative machine halves, characterized in that the bypass current (Ib) from the phases of a machine half is transmitted to the phases of the other machine half.

21. (currently amended) Method for power control according to claim ~~1~~ 4, wherein the main current (Ip) is interrupted in any position (t2) within the phase duration for a short time (t3).

22. (currently amended) Method for power control according to claim ~~1~~ 4, wherein the starting current limitation takes place by the interruption of the main current (Ip) when reaching an upper limit, whereby its switching-on again takes place after a short predetermined time or when a lower limit is reached.

23. (previously amended) Method for power control according to claim 16, wherein unavoidable peaks of the self-induction voltage (Ua) are absorbed by Ua depending voltage controlled conducting phases of the power switches (21).

24. (currently amended) ~~Method for power control according to claim 2,~~ Method for controlling the power of electronically switched two-phase reluctance machines with direct transmission of the demagnetization energy of a switched-off phase to the following phase, characterized in that the switching-on of the main current (Ip) takes place delayed by a duration (t) after the phase commutation, wherein between the locking of the power switch (21X) of a phase (X) and the current conducting phase of the switch (21Y) of the following phase (Y), the self-induction voltage Ua, which arises by the switching-off of the phase (X) at the connection between the main winding (112X) and the power switch (21X), is supplied over a bypass diode (22) to a phase (Y, X, Y) which is not separated from the source of current, wherein important control and protective functions of the machine are carried out by the control of the power switches (21) for which their gate electrodes (Gx, Gy) are triggered as required over phase commutation, power control on/off, overvoltage and undervoltage protection, thermal switching-off, overcurrent and short-circuit as well as protection against inductive voltage peaks (Ua).

25. (currently amended) ~~Method for power control according to claim 2,~~ Method for controlling the power of electronically switched two-phase reluctance machines with direct transmission of the demagnetization energy of a switched-off phase to the following phase, characterized in that the switching-on of the main current (Ip) takes place delayed by a duration (t) after the phase commutation, wherein between the locking of the power switch (21X) of a phase (X) and the current conducting phase of the switch (21Y) of the following phase (Y), the self-induction voltage Ua, which arises by the switching-off of the phase (X) at the connection between the main winding (112X) and the power switch (21X), is supplied over a bypass diode (22) to a phase (Y, X, Y) which is not separated from the source of current, wherein for reluctance machines without stator with two independent rotors (1, 2), their field rotor (1) carries the power electronics (21, 22) and a part of the power control which receives the control signals from outside contactless

by means of an axially mounted Hall sensor (39) which is triggered by a stationary winding (49).

26. (previously amended) Method for power control according to claim 24, wherein the synchronization of the signals of the winding (49) takes place by the recognition of the form of the current and voltage paths in the connecting lines.

27. (previously amended) Method for power control according to claim 10, wherein the flip-flop signals of the phase control which have been obtained on outputs (Hx, Hy) of the phase control (31) charge alternately capacitors (Cl) corresponding to each phase during the high phase, whereby phase synchronized time decreasing voltage levels (Ur) arise due to their discharging during the following low phase in series with resistors (Rt), these voltage levels being referred to the phase beginning and being conducted to the input of a level detector (ST, Dr).

28. (currently amended) ~~Method for power control according to claim 1,~~ Method for controlling the power of electronically switched two-phase reluctance machines with direct transmission of the demagnetization energy of a switched-off phase to the following phase, characterized in that the switching-on of the main current (Ip) takes place delayed by a duration (t) after the phase commutation, wherein the phase commutation signals positive or negative fractions are separated from which, by integration by means of capacitors (Cv) or resistors (Pv) slowly variable analog voltage signals are obtained which can be adjusted as nominal value and which are proportional to the number of revolutions of the motor.

29. (previously amended) Method for power control according to claims 27 or 28, wherein phase synchronized voltage levels (Ul) are superposed with analog voltage (Uv) over a resistor (Rv) which causes a ripple for adjusting the number of revolutions and are supplied to level switch(es) (ST, Dr) in such a way that it thus controls the number of

revolutions of the motor from the time of the phase commutation to the reaching of a sawtooth voltage (Uv) which determines the rise-delay (t) of the power switches (21).

30. (previously amended) Method for power control according to claim 24, wherein the electric potentials of the gate electrodes (Gx, Gy) of the power switches (21X, 21Y) can be switched low independently from each other by the phase control (31) and/or by a level discriminator (ST).

31. (previously amended) Method for power control according to claim 27, wherein respectively one driver component (Dr) is used per phase, outputs (I) of which show respectively one level detector each and outputs (O) of which switch gate electrodes (Gx, Gy) of the power switches (21) alternately from low to high potential.

32. (currently amended) ~~Method for power control according to claim 1,~~ Method for controlling the power of electronically switched two-phase reluctance machines with direct transmission of the demagnetization energy of a switched-off phase to the following phase, characterized in that the switching-on of the main current (Ip) takes place delayed by a duration (t) after the phase commutation, wherein analog signals depending on the number of revolutions are used as negative feedback for influencing the starting behavior and the speed control of the motor.